DOCUMENT RESUME

ED 396 857 PS 024 440

AUTHOR Nunnelley, Jeanette
TITLE The Impact of Half-Day versus Full-Day Kindergarten Programs on Student Outcomes: A Pilot Project. Project Report.
PUB DATE Mar 96
NOTE 13p.
PUB TYPE Reports - Evaluative/Feasibility (142)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Comparative Analysis; Developmental Programs; *Full Day Half Day Schedules; Individual Development; Interpersonal Competence; *Kindergarten; Kindergarten Children; Language Acquisition; Language Skills; Maturity Tests; *Outcomes of Education; Parent Participation; Primary Education; Time Factors (Learning); Vocabulary Development; Vocabulary Skills
IDENTIFIERS Elementary Secondary Education Act Title I; Indiana (New Albany)

ABSTRACT

This pilot study compared developmental outcomes, academic achievement, and parent involvement for children attending a Title I full-day kindergarten with those of children attending a Title I half-day program in New Albany, Indiana. The subjects were nine children from the full-day program and ten children from the half-day program. The curriculum in each of the classrooms was evaluated using the Early Childhood Environment Rating Scale (ECERS). To record student gains in September and May of the school year, teachers administered the Developmental Checklist of The Work Sampling System. The Peabody Picture Vocabulary Test (Revised) and a teacher-formulated checklist were also given. Demographic and attendance information was gained from parent/guardian interviews or school records. Parent involvement information was gained on frequency of checking out materials from a lending library and attendance at parent meetings. Findings revealed no differences in the curricula of the two programs. There were few differences in demographic data, except that a greater percentage of parents in the half-day program were employed than in the full-day program. There were no differences in any child assessment measures; the greatest gains for both groups were in the domains of language and literacy and mathematical thinking, and the smallest gains were in personal and social development. There was greater parent workshop attendance in the full-day program. Further study with a larger sample was recommended. (KDFB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
X This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

ED 396 857

PROJECT REPORT
The Impact of Half-Day Versus Full-Day Kindergarten Programs on Student Outcomes: A Pilot Project

Submitted to:

New Albany - Floyd County Consolidated School Corporation

By

Jeanette Nunnelley, Assistant Professor
Division of Education, Indiana University Southeast

March 1996

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY
Jeanette C. Nunnelley
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

PS 024440

BEST COPY AVAILABLE

ACKNOWLEDGEMENTS

Funding for this project was made possible by the Grant-In-Aid program at Indiana University Southeast.

The author is grateful to the New Albany - Floyd County Consolidated School Corporation for allowing the study to take place. Those individuals whose assistance was greatly appreciated include:

Roger Moody, Director of Learning

Margaret Harshfield, Assistant Director of Learning

Sheryl Burns, Title I Facilitator

Jane Funk, Kids Garden

Jan Singleton, Kids Garden

Rosetta Harvey, Pineview Elementary.

The author also acknowledges Marla Gunsallus, student assistant for the project. Her computer data entry and analysis as well as her organizational skills were invaluable.

ABSTRACT

The number of full-day kindergarten programs for at risk children has increased nationally. Policy makers and funding sources must evaluate the outcomes of such programs with the less expensive traditional approach of half-day attendance. This study compared developmental outcomes and use of special services of children attending a Title I full-day kindergarten with children attending a Title I half-day program. Demographics, quality of curriculum, attendance, parent involvement activities and assessments of developmental gains were examined. Findings showed that when all else is essentially equal, there were no differences in measured outcomes for children participating in a full-day versus half-day program. Further study with a much larger sample size is needed.

PROJECT REPORT
The Impact of Half-Day Versus Full-Day Kindergarten Programs on Student Outcomes: A Pilot Project

The general purpose of the project was to study the impact of full-day versus half-day kindergarten programs on the developmental and academic achievement levels of educationally at-risk children. It was funded through a Grant-In-Aid at Indiana University Southeast. The first year's implementation was to serve as a pilot project for a possible broader and more comprehensive longitudinal study following the children in both groups as they transitioned into the elementary grades and later schooling.

BACKGROUND

The New Albany-Floyd County Consolidated School Corporation located in New Albany, Indiana has implemented several program models in kindergarten for young at-risk students. As more and more school districts invest funds and personnel in similar endeavors, it is imperative that research document immediate student outcomes, compare those outcomes among different models, and follow the transition of the students into early elementary grades. It is also important that teachers and policy makers be aware of the demographics of the populations they are serving in special programs as well as usage of any special services such as parent meetings and use of enrichment materials.

In 1992, approximately 58% of kindergartners attended half-day programs, but there has been a growing trend to implement full-day programs, particularly for the "at-risk" student (Karweit, 1992). Full-day programs appear to have modest positive effects for the at-risk population. Earlier research indicated that children in longer day programs demonstrated greater gains in test scores than those who attended for fewer hours (Adcock, 1980; Anderson, 1983; Carapella & Loveridge, 1978; Jarvis & Molnar, 1983; and Terens, 1984).

More recent studies also document the positive effects of full-day programs on achievement in the first grade (Koopmans, 1991; and Cryan, 1992). Holmes and McConnell (1990), however, found no differences in measures of the California Achievement Tests between students attending full-day programs as compared to those in half-day programs. There have been few longitudinal studies of comparisons between shorter and longer day programs (Peck, McCaig, & Sapp, 1988).

Regardless of the length of day, policy makers, teachers, and administrators must also evaluate the quality of early childhood programs in terms of developmentally appropriateness (Peck, McCaig, & Sapp, 1988). Additional related issues such as parental preference, teacher availability, and administrative funding must also be considered in the overall planning of programs.

METHODOLOGY

Research Sites and Sample Selection

Kids' Garden operated at the Reisz Center was the research and sample selection site for the kindergarten children participating in a full-day program (experimental group). It was located in a predominantly low-income area and was funded through Title I. A control group of similar children attending a half-day kindergarten program, also in a low-income area and funded through Title I, was obtained from Pineview Elementary. Either the Principal Investigator or the Parent Coordinator at the schools contacted randomly selected parent/guardians of all students participating in Title I kindergarten programs; they were given information about the project. If the parents/guardians were interested in participating, they signed an Informed Consent Statement and participated in a brief interview. This

BEST COPY AVAILABLE

process continued until a sample of 9 children was obtained for the all-day program and a sample of 10 children was obtained for the half-day program.

Curriculum. Each of the four kindergarten classrooms from which the samples were drawn was evaluated using the Early Childhood Environment Rating Scale (ECERS) (Harms & Clifford, 1980) to determine if the programs were similar in their day-to-day curricula. The scale examines seven areas: personal care routines, furnishings display, language reasoning experiences, fine/gross motor activities, creative activities, social development and adult needs. If all four classroom were similar across all the scales, conclusion could be based on the length of day rather than for differences in the curriculum being taught.

Parent Involvement. A sample of children participating in Title I (federally funded reading program for low-achieving and possibly low-achieving students) was utilized to control for additional school services which might bias the results. Because Title I has certain parent involvement requirements which are implemented among all participating schools, the children in the study had the same opportunities for parent involvement assistance - regardless of the length of the school day. Family workshops about literacy and other topics were made available to both groups as well as a lending library of materials and games. Additionally, parents in Title I programs were strongly encouraged to read to their children as much as possible.

Data

Assessment. In September and May of the school year, the Developmental Checklist of The Work Sampling System (Jablon, J., Marsden, D., & Meisels, S., 1993) was routinely administered by the teachers. The checklist reflects common activities and expectations in

classrooms that are structured around developmentally appropriate activities. It consists of items in seven domains: personal and social development, language and literacy, mathematical thinking, scientific thinking, social studies, the arts, and physical development. Each domain is composed of several functional components which are further defined by performance indicators that refer to children's specific behaviors, skills, or accomplishments. Accompanying the checklist are guidelines with rationales and examples which enable teachers to apply the checklist consistently. For the purposes of this project, gains made by students on each individual item of each domain were recorded. Other assessment instruments utilized were a teacher-formulated checklist and the Peabody Picture Vocabulary Test - Revised (Dunn & Dunn, 1981).

Other data. Demographic and attendance data were gathered on the participants through the parent/guardian interview or school records. Information was also obtained on how frequently parents checked out materials from an available lending library and on how often they attended parent meetings.

RESULTS

Demographic Data

An analysis of the demographic data for the children in both the full-day and half-day programs revealed few differences. The age, type of household (couple-headed, single parent, etc.), number of children in the family, ethnic makeup, location of home, and sex were essentially the same in the two samples. The exception was employment status when both parents were present in the home. In the full-day program, 27% of the these parents were employed compared to 72% for the half-day program. Approximately 50% of the

BEST COPY AVAILABLE

children in both groups had attended a preschool situation. Recorded daily attendance figures were approximately the same for both groups.

Assessment Data

Differences. No significant differences were found between the full-day and half-day programs on any of the assessment measures. Mean gains on the Peabody Picture Vocabulary Test were slightly more for the half-day program. There were no differences found on gains indicated by the teacher-formulated checklist. In all seven domains of The Work Sampling System, the gains were essentially the same in both groups.

Gains in both groups. According to The Work Sampling System, the greatest gains by both groups occurred in the domains of Language and Literacy and Mathematical Thinking. Interaction with others within the domain of Personal and Social Development showed the least amount of gains in both groups.

Parent Involvement

There was clearly more participation in parent workshops for the full-day program. Of the 10 parents who attended three or more workshops, 8 (80%) were from the full-day program and all four of the parents who had attended six to seven workshops were from the full-day program. Only one parent from the full-day program had attended less than three times while 8 of the 10 parents from the half-day program had attended less than three workshops.

The use of materials or games which could be checked out by parents in both programs was approximately the same, but the overall usage of this resource was low. Only 31% of the parents in both groups checked out materials "about once a week" or "daily".

9 BEST COPY AVAILABLE

Approximately 68% of all the parents reported they used this resource "about once a month", "not very often", or "never" with the greatest response being "not very often" (47%). The reported amount of reading to their children was much better than the use of materials and games. Sixteen (84%) said they read to their child "daily" and 3 (16%) read to their child "about once a week".

Curriculum

An analysis of the scores on the Early Childhood Environment Rating Scale showed that the curricula in all the classrooms from which the children were selected were basically the same. All four classrooms scored in the upper ten percent across all of the scales with no differences greater than five points. The children seemed to be exposed equally to developmentally appropriate activities and a high quality early childhood program.

CONCLUSIONS

Because the sample size was small, generalization from this particular study can only be speculative. However, because of the similarities in demographic data, school attendance, previous preschool experiences, parent involvement opportunities, and curriculum, a cautious conclusion can be made about the length of day in kindergarten programs. When all else is essentially equal, there are no differences in measured outcomes for children participating in a full-day versus half-day program. Further study with a much larger sample size is needed.

The full-day program did seem to provide more participation in parent workshops, but this could have been a result of fewer working parents in the full-day program. The emphasis on parents reading to their children as established by the Title I program seemed to

BEST COPY AVAILABLE

be working. Because of the low usage of materials and games provided by the program, enhancement of this service seems warranted.

It is interesting to note the clear emphasis on language and literacy in the classrooms as shown by the gains in that domain of The Work Sampling System. Conversely, more emphasis on personal and social development is indicated. Clearly the children were not making as significant progress (as judged by the teachers) in this domain. The general profile of at-risk children might affect this particular aspect, but activities which enhance this important realm of school behavior seem to be needed.

In summary, this project provided an indication that there are no differences in the measured outcomes between children participating in a full-day versus half-day program. An unexpected conclusion was how much parents do read to their children as emphasized by the Title I program. In addition to knowledge in the general outcomes associated with the length of day, information was obtained on procedures and methodologies for future studies with a larger sample size. It is interesting to note, as well, that even without standardized testing situations, further enhancement of high quality programs can be made simply by reviewing the findings of a more authentic assessment measure, such as a developmental checklist.

It is important that research continue to evaluate and study the various options available in high quality early childhood facilities, such as half-day versus full-day programs.

REFERENCES

Adcock, E.P. (1980). A comparison of half-day and full-day kindergarten classes on academic achievement. Baltimore, MD: Maryland State Department of Education. (ERIC Document Reproduction Service No. ED 194 205)

Anderson, E. (1983). Increasing school effectiveness: The full-day kindergarten. Paper presented at the Annual Meeting of the American Educational Research Association, Montreal, Quebec, Canada. (ERIC Document Reproduction Service No. ED 248 036)

Carapella, R. & Loveridge, R. (1978). A comparative report of the achievement of the kindergarten extended day program. St. Louis, MO: St. Louis Public Schools. (ERIC Document Reproduction Service No. ED 198 144)

Cryan, J. (1992). Success outcomes of full-day kindergarten: More positive behavior and increased achievement in the years after. Early-Childhood Research Quarterly, 7 (2): 187-203.

Dunn, L.M. & Dunn, L.M. (1981). Peabody Picture Vocabulary Test- Revised. Circle Pines, MN: American Guidance Service.

Harms, T. & Clifford, R. (1980). Early childhood environment rating scale. New York: Teachers College Press.

Holmes, C. & McConnell, B. (1990). Full-day versus half-day kindergarten: An experimental study. Paper presented at the Annual Meeting of the American Educational Research Association, Boston, MA. (ERIC Document Reproduction Service No. Ed 369 540)

BEST COPY AVAILABLE

Jablon, J., Marsden, D., & Meisels, S. (1993). The Work Sampling System. Ann Arbor MI: Rebus Planning Associates, Inc.

Jarvis, C. & Molnar, J. (1983). All-day kindergarten program effects on student growth. O.E.A. Evaluation Report. New York: Office of Educational Assessment, New York City Board of Education.

Karweit, N. (1992). The kindergarten experience. Educational Leadership.

Koopmans, M. (1991). A study of the longitudinal effects of all-day kindergarten attendance on achievement. Newark, NJ: Newark Board of Education, Office of Research, Evaluation and Testing. (ERIC Document Reproduction Service No. Ed 336 494)

Peck, J.T., McCaig, G., & Sapp, M.E. (1988). Kindergarten policies: What is best for children. Washington, DC: National Association for the Education of Young Children.

Terens, S. (1984). Second year full-day kindergarten program evaluation, Lawrence Public Schools, Number Four School. Paper presented at the Annual Meeting of the American Educational Research Association, New Orleans, LA. (ERIC Document Reproduction Service No. ED 251 177)